

Express Mail No.: EV741775631US
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Preliminary Amendment

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for targeted-~~disruption~~disruption of an arbitrary gene in the genome of a living organism, comprising the steps of:
 - A) providing information of the entire sequence of the genome of the living organism;
 - B) selecting at least one arbitrary region of the sequence;
 - C) providing a vector comprising a sequence complementary to the selected region and a marker gene;
 - D) transforming the living organism with the vector; and
 - E) placing the living organism in a condition allowing homologous recombination.
2. (Currently Amended) The method ~~accoding~~according to Claim 1 wherein in step B, the region comprises at least two regions.
3. (Currently Amended) The method ~~accoding~~according to Claim 1, wherein the vector further comprises a promoter.
4. (Original) The method according to Claim 1 further comprising the step of detecting an expression product of the marker gene.
5. (Original) The method according to Claim 5 wherein the marker gene is located in the selected region.

6. (Original) The method according to Claim 1, wherein the maker is located outside of the selected region.

7. (Original) The method according to Claim 1, wherein the genome is the genome of *Thermococcus kodakaraensis* KOD1.

8.-51. (Canceled)

52. (Original) An RNAi molecule having a sequence homologous to a reading frame sequence wherein, when the reading frame of Table 2 is f-1, f-2 or f-3, the reading frame sequence has a sequence from the position of nucleic acid number (antisense strand, start) of SEQ ID NO: 1087 of Table 2, to the position of nucleic acid number (antisense strand, stop) or a sequence having at least 70% homology thereto.

53. (Original) The RNAi molecule according to Claim 52, which is an RNA or a variant thereof comprising a double-stranded portion of at least 10 nucleotide length.

54. (Original) The RNAi molecule according to Claim 52, comprising a 3' overhang terminus.

55. (Original) The RNAi molecule according to Claim 54, wherein the 3' overhang terminus is a DNA having at least 2 nucleotides in length.

56. (Original) The RNAi molecule according to Claim 54, wherein the 3' overhang terminus is a DNA of two to four nucleotides in length.